

COMPATIBILITY DETERMINATION

Use: Research by a Third Party

Refuge Name: Crab Orchard National Wildlife Refuge

Establishing and Acquisition Authorities: Public Law 80-361 and the Refuge Recreation Act

Refuge Purposes: The mission of the National Wildlife Refuge System is to administer a national network of lands and waters for the conservation, management, and where appropriate, restoration of the fish, wildlife, and plant resources and their habitats within the United States for the benefit of present and future generations of Americans.

Crab Orchard National Wildlife Refuge was established by Public Law 80- 361 "... for the conservation of wildlife, and for the development of the agricultural, recreational, industrial, and related purposes ..." (61 Stat. 770, dated Aug. 5, 1947), "... suitable for -(1) incidental fish and wildlife-oriented recreational development, (2) the protection of natural resources, (3) the conservation of endangered species or threatened species..." 16 U.S.C. ' 460k-1 "... the Secretary ... may accept and use ...real...property. Such acceptance may be accomplished under the terms and conditions of restrictive covenants imposed by donors ..." 16 U.S.C. ' 460k-2 (Refuge Recreation Act (16 U.S.C. ' 460k-460k-4), as amended).

On October 19, 1976, Congress enacted Public Law 94-557 designating a portion of the Refuge one of many wilderness areas of the National Wilderness Preservation System "... administered for the use and enjoyment of the American people in such a manner as will leave them unimpaired for future use and enjoyment as wilderness, and so as to provide for the protection of these areas, the preservation of their wilderness character, and for the gathering and dissemination of information regarding their use and enjoyment as wilderness ..." (Wilderness Act, Public Law 88-577, 78 Stat. 892)

Description of Use: The Refuge allows scientific research on a variety of biological, physical, and social issues and concerns to address refuge management information needs or other issues. Studies are conducted by federal, state, and private entities, including the U.S. Geological Survey, Illinois Department of Natural Resources, state and private universities (i.e., Southern Illinois University, University of Illinois, Illinois Natural History Survey), and non-governmental organizations. Each year, the Refuge issues Special Use Permits (SUPs) for biological and physical research studies. Research study sites, sampling locations, and transects may be temporarily marked by highly visible flagging, wooden or metal posts that must be removed when research ceases. Access to study sites is by foot, truck, UTV/ATV, boat, canoe, and other watercraft. Vehicle use is allowed on Refuge roads, trails, and parking lots normally open to the public. Authorized research activities are allowed in "Open" areas of the Refuge through the SUP process. Closed areas are not open to research activities unless specifically authorized in the SUP.

Availability of Resources: The Refuge uses existing staff to issue SUPs for research projects that occur on the Refuge. Currently, staff resources are deemed adequate to manage this use at

anticipated use levels. Access points, boats, other vehicles, miscellaneous equipment, and limited logistical support are available and subject to usage by Refuge Manager's discretion.

Anticipated Impacts of the Use: Scientific research may disturb fish and wildlife and their habitats. Research activities can cause disturbance, injury, or death to groups of wildlife or to individuals. To wildlife, the energy cost of disturbance may be appreciable in terms of disruption of feeding, displacement from preferred habitat, and the added energy expended to avoid disturbance. Sampling activities can cause compaction of soils and the trampling of vegetation, the establishment of temporary foot trails and boat trails through vegetation beds, disruption of bottom sediments, and minor tree damage when temporary observation platforms are built or marking locations. The removal of vegetation or sediments by core sampling methods can cause increased localized turbidity and disrupt non-target plants and animals. Installation of posts, equipment platforms, collection devices, and other research equipment may present a hazard to heavy equipment operators if said items are not adequately marked and/or removed at appropriate times or upon completion of the project. Research efforts may also discover methods that result in a reduction in impacts described above.

Public Review and Comment: This compatibility determination was posted for 14 days at the Refuge and in local libraries as well as on the Refuge website. Concerns expressed during the public comment period have been addressed through the stipulations necessary to ensure compatibility as well as the conditions of the special use permit.

Determination:

☐ Use is Not Compatible

☒ Use is Compatible with the Following Stipulations

Stipulations Necessary to Ensure Compatibility: The following stipulations are required to ensure compatibility and will be attached to all issued SUPs:

1. Failure of the permittee to abide by any part of the SUP or violation of any state or federal regulation will, with due process, be considered grounds for revocation of the SUP and could result in denial of future SUP requests for lands administered by the U.S. Fish and Wildlife Service. This provision applies to all persons working under the authority of the SUP.
2. Prior to conducting investigations, researchers will obtain a SUP from the Refuge that contains specific stipulations related to when, where, and how the research will be conducted. The Refuge Manager retains the option to prohibit research if there are concerns for undo resource disturbance or harm.
3. The permittee is responsible for ensuring all persons working under the authority of the SUP are familiar with and adhere to the conditions of the SUP.
4. The permittee must possess all applicable State and Federal permits for the capture and possession of protected species, for conducting regulated activities in wetlands, and for other regulated activities.

5. For inclusion in the decision-making and management process, researchers will submit findings to the Refuge Manager. Multi-year projects will require annual reports (normally 1-3 pages) within 30-days of each field season and a final report is required of all research activities within 6 months of final field season. Not submitting annual reports may result in revocation of the SUP for the following year. Not submitting final reports may result in future SUP applications not being approved.
6. The Refuge Manager may request research findings to be presented by researchers at an internal FWS seminar.
7. Research must provide site specific or range wide information such as census data or management recommendations capable of informing Refuge management decisions regarding fish or wildlife populations or their habitats that occur on the Refuge.
8. Researchers shall not enter Restricted Use Areas of the Refuge unless entry is authorized in the SUP.
9. Construction of permanent structures is prohibited. Researchers must clearly mark posts, equipment platforms, fencing material, and other equipment left unattended to reduce the hazard. Such items shall be removed promptly upon completion of the research.
10. Research involving collections will be extremely restricted and require pre-approval by the Refuge Manager. Species may not be collected in the Wilderness portion of the Refuge without specifically addressing the justification for the exclusive need to collect from this portion of the Refuge prior to collecting.
11. A copy of the SUP must be in each member of the research party's possession at all times while exercising the privileges of the SUP.
12. Researchers will follow gate key check out and check in procedures.
13. Any personally-owned vehicle used for research activity must possess a current Refuge entry pass.

Justification: Research by third parties plays an integral role in Refuge management by providing information needed to manage the Refuge, its fish, wildlife and habitats utilizing the latest and best science available. Investigations into the biological, physical, archeological, and social components of the Refuge provide a means to analyze management actions, impacts from internal and outside forces, and ongoing natural processes on the Refuge environment. Research provides scientific evidence as to whether the Refuge is functioning as intended. Further, according to the Wilderness Act of 1964, science is one of the purposes of Wilderness: "...wilderness areas shall be devoted to the public purposes of recreational, scenic, scientific, educational, conservation, and historical uses." (Section 4(b)).

Adverse impacts of research that cause localized vegetation trampling or disruption of wetland soils and bottom sediments are often short-term and will be minimized through stipulations above. Vehicular access is allowed only on roads normally open to the public, thus resulting in no net increase in vehicular impacts. Researchers are allowed to conduct research only in areas indicated on the SUP. Any research equipment that remains in the field for the duration of the project will be clearly marked to avoid potential hazards presented to Refuge staff and other Refuge users.

NEPA Compliance for Refuge Use Decision

- ☒ X Categorical Exclusion without Environmental Assessment
- ☐ Categorical Exclusion and Environmental assessment
- ☐ Environmental Assessment and Record of Decision
- ☐ Environmental Assessment and Finding of No Significant Impact

Categorical exclusions are classes of actions which do not individually or cumulatively have a significant effect on the human environment. Approved research at Crab Orchard National Wildlife Refuge can be categorically excluded from the EA process under Departmental Manual 516 DM6 Appendix 1.4 Categorical Exclusions General section C (3), as outlined below.

C. Permit and Regulatory Functions

(3) The issuance of special regulations for public use of Service managed land, which maintain essentially the permitted level of use and do not continue a level of use that has resulted in adverse environmental effect.

Signature: Refuge Manager: _____ Date: _____

Concurrence: Regional Chief: _____ Date: _____

Mandatory 10-year Re-evaluation Date: 2023